

IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~striketrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

1. (Original) A relation chart-creating program for creating a relation chart representative of relations between a plurality of documents, the program causing a computer to:
analyze contents of each of the documents and extract feature elements including time information therefrom;

calculate a degree of relevancy between each document pair extracted from the documents, based on the extracted feature elements;

lay out objects indicative of the documents, along a time axis, based on the time information, and generate association lines for connecting between the objects of each document pair, depending on the calculated degree of relevancy; and

display the relation chart composed of the objects and the association lines.

2. (Original) The relation chart-creating program according to claim 1, wherein when the association lines are generated, the association lines between predetermined ones of the document pairs are discarded for thinning-out based on the degree of relevancy of the document pair without citation relationship.

3. (Original) The relation chart-creating program according to claim 1, wherein when the association lines are generated, ones of the association lines between ones of the document pairs having the citation relationship are displayed in a form of display different from a form of display in which the others of the association lines are displayed.

4. (Original) The relation chart-creating program according to claim 1, wherein when the objects indicative of the documents are laid out, at least ones of the objects indicative of the document pairs having relevancy are arranged along the time axis in an order based on the time information.

5. (Original) The relation chart-creating program according to claim 1, wherein when

the objects indicative of the documents are laid out, the objects indicative of the documents are arranged along the time axis in an order based on the time information.

6. (Original) The relation chart-creating program according to claim 1, wherein when the objects indicative of the documents are laid out, the time axis is represented in basic units each corresponding to a predetermined time period, and the order along the time axis is preserved between objects indicative of the documents belonging to different ones of the time periods.

7. (Original) The relation chart-creating program according to claim 1, wherein assuming that patent documents are inputted as the plurality of documents, in extracting the feature elements, dates of application are extracted as the time information.

8. (Original) The relation chart-creating program according to claim 1, wherein assuming that patent documents are inputted as the plurality of documents, in extracting the feature elements, dates of application and priority dates are extracted as the time information, and

wherein when the objects indicative of the documents are laid out, if a date of application and a priority date have been extracted from a document, the priority date is regarded as the time information of the document.

9. (Original) A method of creating a relation chart representative of relations between a plurality of documents, comprising the steps of:

analyzing contents of each of the documents and extracting feature elements including time information therefrom;

calculating a degree of relevancy between each document pair extracted from the documents, based on the extracted feature elements;

laying out objects indicative of the documents, along a time axis, based on the time information, and generating association lines for connecting between the objects of each document pair, depending on the calculated degree of relevancy; and displaying the relation chart composed of the objects and the association lines.

10. (Original) A relation chart-creating apparatus for creating a relation chart representative of relations between a plurality of documents, comprising:

feature element-extracting means for analyzing contents of each of the documents and extracting feature elements including time information;

relevancy-calculating means for calculating a degree of relevancy between each document pair extracted from the documents, based on the extracted feature elements;

layout means for laying out objects indicative of the documents, along a time axis, based on the time information;

association line-generating means for generating association lines for connecting between the objects of each document pair, depending on the calculated degree of relevancy; and

display means for displaying the relation chart composed of the objects and the association lines.

11. (Original) A computer-readable recording medium that records a relation chart-creating program for creating a relation chart representative of relations between a plurality of documents, the program causing a computer to:

analyze contents of each of the documents and extract feature elements including time information therefrom;

calculate a degree of relevancy between each document pair extracted from the documents, based on the extracted feature elements;

lay out objects indicative of the documents, along a time axis, based on the time information, and generate association lines for connecting between the objects of each document pair, depending on the calculated degree of relevancy; and

display the relation chart composed of the objects and the association lines.